# 2003 State Aquatic Reserves Technical Advisory Committee Recommendation

### **Maury Island Site**

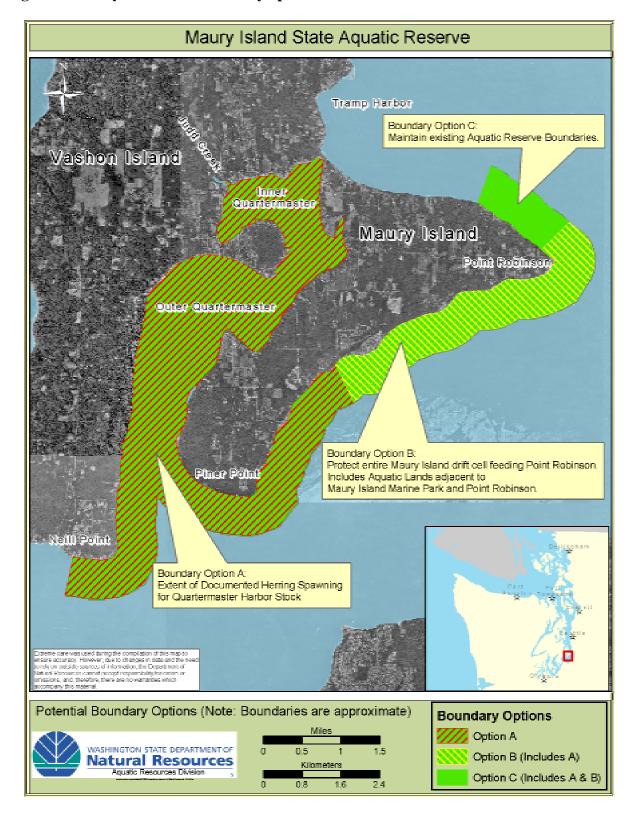
The Aquatic Reserve Technical Advisory Committee (Committee) unanimously recommended managing this site as an Environmental Aquatic Reserve. Environmental attributes noted by the Committee that make the site unique and critical for conservation include:

- The site includes a significant spawning area for a major stock of herring. Quartermaster Harbor represents one of only 18 distinct Pacific herring spawning areas in Puget Sound. Herring are a critical food source for all the higher predators on the food chain, including salmon. Herring spawn in Quartermaster Harbor and along the southeastern shore of Maury Island (the site captures nearly all of the documented extent of the Quartermaster Harbor herring stock). The site also includes a small portion of the stock's pre-spawning holding area.
- Quartermaster Harbor is identified by the Audubon Society as an Important Bird Area and in particular an important area for wintering marine birds, especially western grebes.
- The area includes extensive eelgrass flats.
- The eastern shore of Maury Island is included in a unique continuous drift cell (area of mud, sand, or gravel material moved in the nearshore zone by waves and currents) that converges with another drift cell at Point Robinson.
- The area and associated habitat and species are a good site for conservation in the central Puget Sound region.
- Overall habitat diversity of the site is great for the bioregion (extensive eelgrass beds, kelp beds, limited salt marsh habitat, herring spawning grounds, surf smelt spawning grounds, sand lance spawning grounds, Chinook salmon migratory corridors, bull trout migratory corridors, and bottom fish rearing habitat, and an important wintering ground for western grebe populations). There are not many other comparable locations in the bioregion. Herring spawning grounds and western grebe wintering grounds are not replicated anywhere else in the region.
- Reserve status will provide incentive to King County and the local citizens to promote conservation planning and management (in the area).

#### **Boundaries**

The Committee unanimously recommended that the reserve boundary should include at a minimum, Quartermaster Harbor (starting at Neill Point) and the furthest extent of surveyed herring spawning area along the eastern shore of Maury Island. However, the Committee's recommendations varied regarding the existing reserve boundaries to the north, along the eastern shore of Maury Island. The Committee's recommendation for Maury Island includes three options for establishing the site boundaries (see figure 1).

Figure 1: Maury Island site boundary options



# 2003 Aquatic Reserve Technical Advisory Committee Recommendation

## **Olympic View Site**

The Technical Advisory Committee (Committee) unanimously recommended not continuing to manage this site as an Environmental Aquatic Reserve.

The following specific comments were the basis of their decision about the site:

- The site is a small piece of Commencement Bay and not particularly significant habitat. The habitat areas established in the north section of Commencement Bay such as Yowkwala, Skookum Wulge, and Squally Beach (see figure 2) are more critical (and already reserved for conservation).
- The site is too small to function as a reserve. Intertidal habitat created at the site is not what would be naturally occurring in the Puyallup River delta.
- The site is not a good fit as an environmental reserve.
- The site is not continuous and is disjoint with the "neodelta." It would be a more valuable site as a portion of one large continuous corridor of sites, including Middle Waterway, connecting to the "neodelta."
- The site doesn't fit with the goals of an environmental reserve. As one isolated element standing on its own it cannot function as an environmental conservation site.
- Reserve status would not provide any additional protection. City of Tacoma is already taking the lead (for protection).

#### Other Comments and Recommendations

- The site may be more appropriate as an educational or scientific reserve. The site's urban location provides for good education opportunities to show people the before and after effects of restoration as well as providing an example of what restoration has accomplished in Commencement Bay.
- The site presently lacks public access to be an educational reserve.
- DNR should be an advocate (for conservation) of these small urban bay environments.
- DNR as an agency should promote the importance of these small-urbanized habitats and promote the restoration efforts within these urbanized landscapes

# 2003 Aquatic Reserve Technical Advisory Committee Recommendation

### Middle Waterway

The Technical Advisory Committee (Committee) unanimously recommended not continuing to manage this site as an Environmental Aquatic Reserve.

The following specific comments were the basis of their decision about the site:

- There is no guarantee that the features currently existing at the site will be able to be
  maintained due to the ongoing physical processes occurring at the site and the
  impacts from ongoing industrial activities adjacent to the site. There are too many
  other (external) threats to the site.
- The size and connectivity to other restored sites is a plus for the site. However, the site will not function as habitat for Chinook (without freshwater input from the Puyallup River). Without freshwater input, the site does not meet the recommendation of the "Simenstad Report" which specifies that the site's success is dependent on freshwater input.
- The site would score higher if a viable freshwater source was included as a restoration element. With a freshwater source the site would provide a higher biological function in the sediment, because a two-way flushing condition would benefit the benthic organisms and a freshwater input would enhance the development of the adjacent restored salt marsh. In addition, the present freshwater input proposals (if implemented) will not meet the objective of providing accessibility for pre-smolts. The original open channel proposal was a much more viable option for osmotic transition for smolts.
- There is no (monitoring) evidence that the mudflat at Middle Waterway is a properly functioning mudflat.
- Reserve status would not provide any additional protection. Threats to the site may
  not be realized due to the interest in the site by the many local and govt. agencies
  invested in the restoration of the area.

### Other Comments and Recommendations

The site may be more appropriate as an educational or scientific reserve. The site's urban location provides for good education opportunities to show people the before and after effects of restoration as well as providing an example of what restoration has accomplished in Commencement Bay.

# 2003 Aquatic Reserve Technical Advisory Committee Recommendation

### Fidalgo Bay

The Technical Advisory Committee (Committee) unanimously recommended managing this site as an Environmental Aquatic Reserve. All members of the Committee recommended maintaining the existing boundaries for the site.

Environmental attributes noted by the Committee during their recommendation are:

- The use by herring that spawn in the bay;
- The use of the area as a larval rearing area;
- The use of the area by migrating marine birds;
- Productive mudflat habitat: and
- Extensive eelgrass flats.

The committee felt that this area represents an important component of the regional ecosystem and that it will complement protective measures being undertaken in Padilla Bay. It was noted that while somewhat similar to Padilla Bay, this site supports a herring spawning stock. Additionally, Fidalgo Bay provides considerable restoration opportunities including potential modifications to a railroad trestle and shoreline hardening associated with roadways. It was viewed as advantageous that most of the ownership on the eastern shoreline is concentrated in a small number of owners.

The committee recognized that the northern extent of the site boundaries captured two important elements of the reserve: portions of the documented Pacific herring spawning area and habitat immediately offshore of Crandall Spit.

# 2003 Aquatic Reserve Technical Advisory Committee Recommendation

### Cypress Island

The Technical Advisory Committee (Committee) unanimously recommended managing this site as an Environmental Aquatic Reserve. The Committee felt that the existing boundaries – surrounding Cypress Island and including Towhead, Strawberry and Cone Islands- are appropriate.

The committee noted that this site represents what environmental reserves should be, with evidence of valued environmental resources, excellent upland conditions and opportunities for coordinating upland, intertidal and subtidal management. Environmental attributes noted by the Committee during their recommendation are:

- The connectivity of the reserve area to upland Natural Areas Program (NAP) and Natural Resource Conservation Area (NRCA) management units;
- The size of the reserve;
- The position between the San Juan Islands and the Strait of Georgia oceanographic regions; and
- The excellent condition of local resources.

### Boundaries

The Committee determined that the existing boundaries surrounding Cypress Island, including Towhead, Strawberry, and Cone Islands are appropriate.

The Committee was prompted to evaluate whether offshore islands, including Cone, Strawberry and Towhead Islands should continue to be included in the reserve. It was decided that the smaller offshore islands comprised an important component of the reserve and that these islands should be encompassed with a similar buffer to Cypress Island. Many of the offshore islands are surrounded by shallow rocky reef habitat.

The Committee was also asked to review the shallow offshore areas to the north of Towhead Island and the south of Cypress Island. The inclusion of shallow areas to the north and south of the reserve were considered appropriate because these areas cover valued and declining bottomfish resources. Fish species commonly found in rocky reef areas include rockfish, and lingcod.

Some Technical Advisory Committee members noted that the irregular boundary of the site might create challenges for educating the public and visitors of the location of the offshore boundary. There may be benefits to designing a boundary that will be more easily interpreted and understood by occasional visitors. This issue is particularly important if management efforts are coordinated with Tribal governments, other state agencies, or non-government organizations.

# 2003 Aquatic Reserve

## **Technical Advisory Committee Recommendation**

### **Cherry Point**

The Technical Advisory Committee (Committee) unanimously recommended managing this site as an Environmental Aquatic Reserve.

- In developing their recommendation, the Committee recognized Cherry Point as an extraordinary stretch of shoreline with excellent potential to maintain the relatively undeveloped character of the area.
- The herring spawning in the area was recognized as a unique biological feature to Puget Sound and its importance to the ecosystem was emphasized.
- It was recognized that aquatic diversity along this reach is very high with cobble intertidal habitat, large rocks and boulders, and kelp just offshore. Additionally, the deep area close to shore and the steep gradient of the intertidal along this reach could be important to marine diversity.
- The Committee noted that, while initially disturbing, industrial development associated with the piers appears to be compatible with aquatic reserve status and noted the opportunity to facilitate multiple-uses as an example where commercial activities and environmental resources can co-exist. It was noted that efforts should be undertaken to limit impacts associated with the piers and industries including limiting pilings, removing fill in the intertidal and restoring/maintaining the natural character of the shorelines.
- The Committee noted the expanding threat posed by residential development along the northern and southern boundaries of the reserve.

### Boundaries

- The Committee voiced strong support for maintaining the north and south boundaries of the existing reserve area. It was noted that there would be increasing threats in the vicinity of Point Whitehorn to the north associated with residential development. Additionally, it was noted that the existing northern boundary abuts Birch Bay State Park and cooperative management with the park could provide protection for a larger portion of the herring spawning area and marine bird aggregation areas.
- The Committee was less certain regarding the offshore boundary of this site. The boundary of the reserve is generally a half-mile offshore, with the exception of a shallow area offshore of the Intalco dock that is included because it is less than 70-feet in depth. At first, some Committee members were uncertain as to whether the area beyond the half-mile offshore of the Intalco dock should be included. The Committee ultimately agreed that the boundary should include the entire photic zone and reflect the original boundaries. All TAC members suggested they would support either a boundary that maintains a half-mile buffer offshore or a boundary that included the entire photic zone.

